State of Utah
GARY R. HERBERT
Governor

GREG BELL
Lieutenant Governor

Department of
Environmental Quality

Amanda Smith
Executive Director

DIVISION OF WATER QUALITY
Walter L. Baker, P.E.
Director

Utah Water Quality Board Meeting

DEQ Building Board Room #1015
195 North 1950 West
Salt Lake City, Utah 84116
March 27, 2013

Board Meeting Begins @ 8:30 a.m.
AGENDA

8:30 a.m. to 10:00 a.m. Water Quality Board Training ..... Walt Baker

A. **Water Quality Board Meeting – Roll Call**

B. (Tab 1) **Minutes:**
1. Approval of Minutes for February 20, 2013 ..... Amanda Smith

C. **Executive Secretary's Report** ..... Walt Baker

D. (Tab 2) **Funding Requests:**
1. Financial Status Report ..... Emily Canton
2. Eureka Introduction ..... Beth Wondimu
3. North Summit Pressurized Irrigation Co Introduction ..... Carl Adams

E. (Tab 3) **Other Business:**
1. Approval of the Statewide NPS Management Plan ..... Jim Bowcutt
2. Update on Utah's Nutrient Strategy ..... Leah Ann Lamb

Next Meeting – May 1, 2013
Dixie Convention Center
Entrada B & C
1835 S. Convention Center Dr.
St. George, Utah 84790

APPROVAL OF MINUTES

FUNDING REQUESTS

OTHER BUSINESS

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OTHER BUSINESS

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MINUTES
UTAH DEPARTMENT OF ENVIRONMENTAL QUALITY
UTAH WATER QUALITY BOARD

DEQ Building Board Room #1015
195 North 1950 West
Salt Lake City, Utah 84116
Wednesday February 20, 2013

UTAH WATER QUALITY BOARD MEMBERS PRESENT

Daniel Snarr	Clyde Bunker	Paula Doughty
Greg Rowley	Leland Myers	Myron Bateman
Steven Simpson	Jeffery Tucker	Merritt Frey

Absent: Amanda Smith, Darrell Mensel and Neal Peacock

DIVISION OF WATER QUALITY STAFF MEMBERS PRESENT

Walt Baker, John Whitehead, Leah Ann Lamb, Faye Bell, Emily Cantón, John Cook, Ed Macauley, Jodi Gardberg, Jeff Ostermiller, Bill Damery, Chris Bittner and Judy Etherington

OTHERS PRESENT

Name	Organization Representing
Ron Bird	ERT
Matt Dugdale	George K. Baum & Co.
Brad Powell	Midvalley Improvement District
Rob Dubuc	WRA
Carlton Christensen	GSL Advisory Council
Justin Elsher	USU Extension

Chair Doughty called the Board meeting to order at 10:05 a.m. and invited the members of the audience to introduce themselves.

APPROVAL OF MINUTES OF THE JANUARY 23, 2013 MEETING

Mr. Myers noted one correction to the minutes. Under "Other Business", following the last sentence where it states, "Mr. Bittner said he would research that". The comment should be added: "It was noted that recent changes to the statute (19-5-104) requires the Board review on any civil penalty of $25,000 or more. This will afford an opportunity for discussion of penalties".

Motion: **It was moved by Mr. Myers and seconded by Mr. Bunker to approve the minutes of the January 23, 2013 meeting with the recommended changes. The motion was unanimously approved.**

Introduction of staff: Mr. Baker introduced Jenny Nicholas who will manage the clerical and reception staff.

Executive Secretary's Report: Mr. Baker stated, that federal sequestration of funds is expected during the next fiscal year. 47% of DWQ's funds come from federal grants; 25% come from fees; and 25% come from restricted accounts. It's been the norm that when EPA has cuts it tends to pass the cuts along to the states rather than internally, affecting the State Revolving Funds, reducing grants and 319 Non-Point Source funds.

HB 215 - Water Quality Amendments. In 1991 DWQ received state general funds to manage the bio-solids program. Utah is one of six states that manages a bio-solids program. The program was originally established to share the cost 50/50 between the state and POTWs with the POTW share capped at $28,000/yr. Representative Wilcox is sponsoring a bill to remove the cap.

SB57S –Senator Okurland is sponsoring this bill. The bill institutionalizes UDAF's Agriculture Environment Stewardship Program but does not affect DWQ's rules or statutes.

HB236 – Representative Brown/Land Development Revisions. This bill which would eliminate the ability of municipalities or counties to revegitate an area if the slope is less than 12%. This works against our Stormwater program which has as a critical part to prevent erosion and the resulting sediments from getting into Utah streams.

Miscellaneous bill (still not numbered) – A bill is being proposed by Senator Okurland that would create a water pollution task force to seat 16 members (8 from the legislature and 8 from the private sector and local government) to look at nutrient pollution and funding as it pertains to non-point source contributors. This task force would further the work of the DWQ-led Nutrient Core Team.

FUNDING REQUEST

Financial Assistance Status Report– Ms. Cantón updated the Board on the "Summary of Assistance Program Funds" as shown on page 2.1 of the Board packet.

Midvalley Improvement District Introduction – Mr. Cook introduced Matt Dugdale with George K. Baum & Company, and Brad Powell, District Engineer. Midvalley Improvement District provides services to portions of Midvale City, Sandy City, Murray City and some unincorporated areas of Salt Lake County. Midvalley Improvement District requested a $1,645,000 loan with a repayment term of 20 years at 2.8% interest for the construction of its 2013 Pipeline Replacement Project.

Motion: **It was moved by Mr. Myers to approve Midvalley Improvement District's request for a $1,645,000 loan with a repayment term of 20 years at 2.8% interest. The motion was seconded by Mr. Rowley and was unanimously approved.**

Great Salt Lake Advisory Funding Request – Mr. Christensen with the Great Salt Lake Advisory Council explained to the Board that in 2012, the Great Salt Lake Advisory Council ("Council") identified waterborne pollutants as a top research priority for Great Salt Lake (GSL). Also in 2012, the Utah Division of Water Quality (UDWQ) released the GSL Water Quality Strategy for public comment. The Strategy encompasses several key components including a proposed process for developing numeric criteria for toxic substances, a short and long-term monitoring strategy, and a prioritization of research needs. The Council is in full support of UDWQ's efforts and is requesting funding from the Utah Water Quality Board to conduct two research studies necessary for strategy implementation. The Council

requested Water Quality Board funding to be used by UDWQ for the highest priority studies for strategy implementation over a 2-year study period. Funding requested was $300,000 for toxicological testing for priority pollutants using GSL-specific species and $100,000 for a laboratory round-robin to evaluate interlaboratory comparability for salinities greater than seawater. The total funding request was for $400,000.

Motion: **It was moved by Mr. Bunker to approve Great Salt Lake Advisory funding request for $400,000. The motion was seconded by Mr. Bateman and was unanimously approved. Leland Myers declared a conflict of interest prior to the Board's vote.**

RULEMAKING

Request to proceed with rulemaking on R317-15, 401 Water Quality Certification: Mr. Damery explained to the Board that Section 401 of the Clean Water ACT requires that any applicant for a federal permit or license to conduct an activity that will or may discharge pollutants into Waters of the United States must present the federal authority with a Water Quality Certification from the appropriate state agency. The draft rule R317-15 is needed to clarify the Water Quality Certification process. Staff also proposed to concurrently revise the 401 Certification and 404 Permit provisions found in the antidegradation section in R317-2-3, as outlined in the next agenda request.

Motion: **It was moved by Ms. Frey and seconded by Mr. Bateman to approve the staff's recommendation to proceed with rulemaking on R317-215, 401 Water Quality Certification. The motion was unanimously approved.**

Request to proceed to Rulemaking on 317-2, Standards of Quality for Waters of the State: Mr. Bittner explained that staff's request is to remove current references to the 401 and 404 certification processes be removed from R317-2 because this language is redundant with, and sometimes contradictory to, the draft 401 Water Quality Certification rules (R317-15 mentioned in the previous agenda request). Staff requested approval to initiate rulemaking, notify local government officials, hold a public hearing and solicit comments from the public and other interested parties, as required by statute.

Motion: **It was moved by Mr. Myers and seconded by Mr. Bunker to approve staff's recommendation to proceed with rulemaking on R317-2, Standards of Quality for Waters of the State, with Merritt Frey serving as hearing officer. The motion was unanimously approved.**

OTHER BUSINESS

Lower Bear River TMDL Revision: Mr. Mike Allred explained that the Division of Water Quality is revising the Total Maximum Daily Load (TMDL) Study for the Lower Bear River. The previous TMDL water quality study was completed in 2002. Since the original TMDL was developed, better information associated with pollutant source identification has been collected. These efforts will confirm whether a nutrient impairment still exists and, if needed, provide a more accurate allocation of nutrient loads. This study will be conducted with the financial support of EPA 319 funds and Utah NPS funds and is being contracted in part with Cirrus Ecological Solutions LLC. It is anticipated that a draft TMDL report and implementation plan will be ready for review by March 2014.

Operator Certification Council Appointments: The terms of service for three members of the Wastewater Operator Certification Council expired January 31, 2013. The Board approved nominees to

fill two of the positions at its January meeting. Staff recommended Richard F. Jex be appointed to fill the remaining position, representing the "Private Sector," for the balance of the term (February 1, 2013 through January 31, 2016).

Motion: **It was moved by Mr. Bateman and seconded by Mr. Bunker to approve staff's recommendation to fill the "Private Sector" position with Richard F. Jex. The motion was unanimously approved.**

Next Meeting – March 27, 2012, 9:00 a.m.
DEQ Building Board Room #1015
195 North 1950 West
Salt Lake City, Utah 84116

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Chair
Utah Water Quality Board

LOAN FUNDS
FINANCIAL PROJECTIONS

STATE REVOLVING FUND (SRF)	3rd Qtr FY 2013 Jan - Mar 2013	4th Qtr FY 2013 Apr - June 2013	1st Qtr FY 2014 July - Sept 2013	2nd Qtr FY 2014 Oct - Dec 2013	3rd Qtr FY 2014 Jan - Mar 2014	4th Qtr FY 2014 Apr - June 2014
Funds Available						
SRF - 1st Round (LOC) 2013 Cap Grant	$ -	$ -	$ -	$ -	$ -	$ -
State Match	-	-	-	-	-	-
SRF - 2nd Round	46,211,588	33,093,425	36,182,653	38,260,341	39,802,493	45,600,929
Interest Earnings at 0.6%	69,317	49,640	54,274	57,391	59,704	68,401
Loan Repayments	-	3,039,588	2,023,414	1,484,761	5,738,733	3,130,065
Total Funds Available	46,280,905	36,182,653	38,260,341	39,802,493	45,600,929	48,799,396
Project Obligations						
Granger-Hunter Improvement District	(702,000)	-	-	-	-	-
Kearns Improvement District (2011)	(5,185,000)	-	-	-	-	-
Santaquin City	(604,480)	-	-	-	-	-
South Valley WRF - NonPoint Source	(305,000)	-	-	-	-	-
Loan Authorizations						
Ephraim City	(2,091,000)					
Francis City	(4,300,000)	-	-	-	-	-
Projects in Planning						
Logan City		-	-	-	-	-
Total Obligations	(13,187,480)	-	-	-	-	-
SRF Unobligated Funds	$ 33,093,425	$ 36,182,653	$ 38,260,341	$ 39,802,493	$ 45,600,929	$ 48,799,396

UTAH WASTEWATER LOAN FUND (UWLF)	3rd Qtr FY 2013 Jan - Mar 2013	4th Qtr FY 2013 Apr - June 2013	1st Qtr FY 2014 July - Sept 2013	2nd Qtr FY 2014 Oct - Dec 2013	3rd Qtr FY 2014 Jan - Mar 2014	4th Qtr FY 2014 Apr - June 2014
Funds Available						
UWLF	$ 10,494,467	$ 8,680,467	$ 6,222,911	$ 7,204,836	$ 8,141,747	$ 9,484,752
Sales Tax Revenue	-	-	896,875	896,875	896,875	896,875
Loan Repayments	-	796,393	412,000	366,986	773,080	824,646
Total Funds Available	10,494,467	9,476,861	7,531,786	8,468,697	9,811,702	11,206,273
General Obligations						
State Match Transfer	-	-	-	-	-	-
DWQ Administrative Expenses	-	(326,950)	(326,950)	(326,950)	(326,950)	(326,950)
Project Obligations						
Murray City	(1,596,000)	-	-	-	-	-
Loan Authorizations						
Coalville		(1,282,000)				
Echo Sewer SSD	(218,000)	-	-	-	-	-
Midvalley Improvement District	-	(1,645,000)				
Projects in Planning						
Eagle Mountain City	-	-	-	-	-	-
Eureka City	-	-	-	-	-	-
Long Valley Town	-	-	-	-	-	-
Total Obligations	(1,814,000)	(3,253,950)	(326,950)	(326,950)	(326,950)	(326,950)
UWLF Unobligated Funds	$ 8,680,467	$ 6,222,911	$ 7,204,836	$ 8,141,747	$ 9,484,752	$ 10,879,323

2.1

*Projects being presented to the WQB
Date Printed: 3/18/2013

HARDSHIP GRANT FUNDS
FINANCIAL PROJECTIONS

HARDSHIP GRANG FUNDS (HGF)	3rd Qtr FY 2013 Jan - Mar 2013	4th Qtr FY 2013 Apr - June 2013	1st Qtr FY 2014 July - Sept 2013	2nd Qtr FY 2014 Oct - Dec 2013	3rd Qtr FY 2014 Jan - Mar 2014	4th Qtr FY 2014 Apr - June 2014
Funds Available						
Beginning Balance	$ -	$ 3,774,179	$ 2,729,276	$ 3,481,357	$ 3,638,198	$ 4,102,278
Federal HGF Beginning Balance	10,405,008	-	-	-	-	-
State HGF Beginning Balance	344,756	-	-	-	-	-
Interest Earnings at 0.6%	16,125	5,661	4,094	5,222	5,457	6,153
UWLF Interest Earnings at 0.6%	15,742	13,021	9,334	10,807	12,213	14,227
Hardship Grant Assessments	-	1,052,481	478,337	-	372,467	1,013,129
Interest Payments	-	269,934	73,315	68,870	73,943	252,720
Advance Repayments	-	1,094,000	1,187,000	71,943	-	-
Total Funds Available	10,781,630	6,209,276	4,481,357	3,638,198	4,102,278	5,388,508
Project Obligations						
Blanding City - Planning Advance	(39,900)	-	-	-	-	-
Coalville - Planning Advance	(25,000)	-	-	-	-	-
Colaville - Construction Grant	-	(3,480,000)	-	-	-	-
Duchesne County - Hancock Cove	(22,000)	-	-	-	-	-
Eagle Mountain - Planning Advance	(18,000)	-	-	-	-	-
Echo Sewer SSD - Construction Grant	(251,000)	-	-	-	-	-
Francis City - Construction Grant	(808,000)	-	-	-	-	-
Francis City - Design Advance	(1,094,000)	-	-	-	-	-
Green River - Planning Grant	(30,000)	-	-	-	-	-
Heber Valley - Planning Grant	(68,000)	-	-	-	-	-
Projects in Planning						
None at this time	-	-	-	-	-	-
Non-Point Source Project Obligations						
DEQ - Economic Study of Nutrient Removal	(72,888)	-	-	-	-	-
DEQ - Nutrient Reduction Benefit Study	(5,053)	-	-	-	-	-
DEQ - Willard Spur Study	(1,092,464)	-	-	-	-	-
Division of Wildlife Resources - Sevier River	(26,349)	-	-	-	-	-
Great Salt Lake Advisory Council	(400,000)					
Twelve Mile Canyon	(79,810)	-	-	-	-	-
UACD	(64,348)	-	-	-	-	-
UDAF	(1,000,000)	-	-	-	-	-
FY 2009 - Remaining Payments	(76,382)	-	-	-	-	-
FY 2010 - Remaining Payments	(134,178)	-	-	-	-	-
FY 2011 - Remaining Payments	(136,077)	-	-	-	-	-
FY 2012 - Remaining Payments	(618,327)	-	-	-	-	-
FY 2013 - Remaining Payments	(945,675)	-	-	-	-	-
FY 2014 Allocation	-	-	(1,000,000)	-	-	-
Non-Point Source Projects in Planning						
None at this time	-	-	-	-	-	-
Total Obligations	(7,007,451)	(3,480,000)	(1,000,000)	-	-	-
HGF Unobligated Funds	$ 3,774,179	$ 2,729,276	$ 3,481,357	$ 3,638,198	$ 4,102,278	$ 5,388,508

2.2

*Projects being presented to the WQB
Date Printed: 3/18/2013

Application Number:
Date Received: February 2013
Date to be presented to the WQB: March 27, 2013

WATER QUALITY BOARD
FEASIBILITY REPORT FOR WASTEWATER SYSTEM PROJECT
INTRODUCTION

APPLICANT:	Eureka City Corporation 15 N. Church Street, PO Box 156 Eureka, Utah 84628 Telephone: (435) 433-6915
PRESIDING OFFICIAL:	Milton R. Hanks, Mayor
CONTACT PERSON:	Doug Nielsen, Sunrise Engineering, Inc.
TREASURER:	Patricia A. Bigler, Recorder
CONSULTING ENGINEER:	Robert W. Worley, P.E. Sunrise Engineering, Inc. 25 East 500 North Fillmore, Utah 84631 Telephone: 435-743-6151
CITY ATTORNEY:	n/a
BOND COUNSEL:	n/a

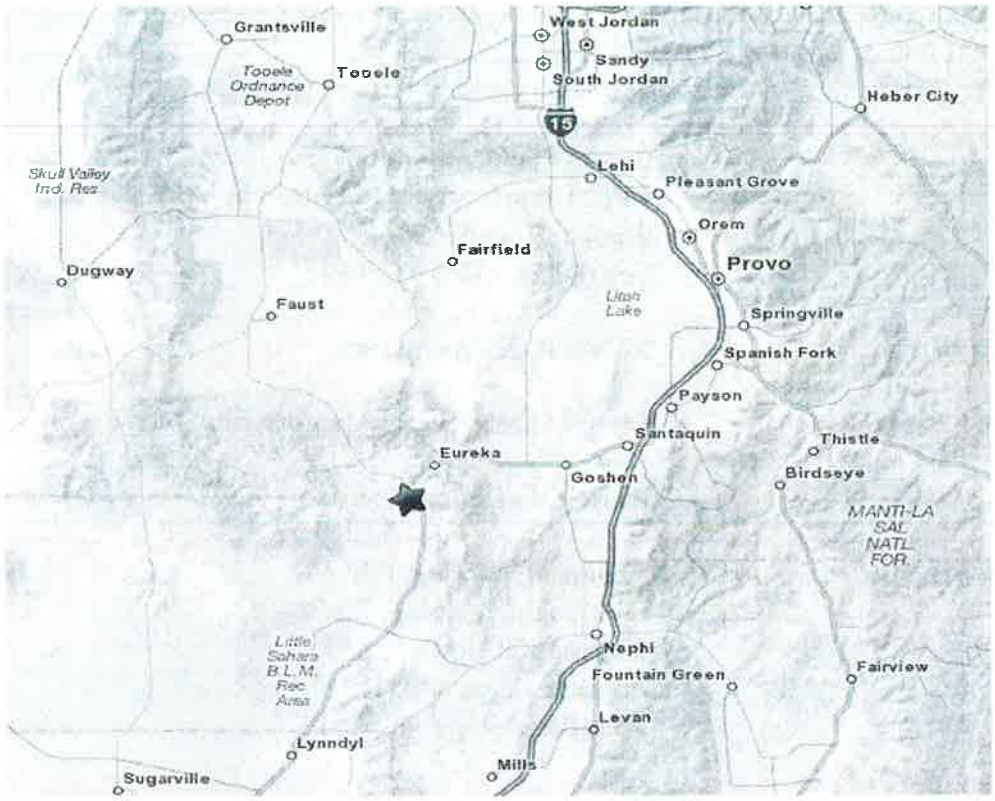
APPLICANT'S REQUEST:
Eureka City is requesting financial assistance in the amount of $1,300,000 loan at an interest rate of 0.0% repayable over 30 years and $1,147,000 grant to upgrade its existing wastewater collection and treatment system. In addition, Eureka City is requesting a Design Advance in the amount of $428,500.

2.3

APPLICANT'S LOCATION:

Eureka City is located in Juab County.

MAP OF APPLICANT'S LOCATION



BACKGROUND

Eureka City currently provides wastewater collection service to 389 residential and non-residential connections. The existing wastewater treatment is a three cell aerated discharging lagoon system with point of discharge to Eureka Creek.

A wastewater facility plan prepared in 2005 identified several necessary sewer improvements. Eureka City has also prepared a preliminary engineering report (PER) to revise and update the facility plan to address all of the necessary improvements for the existing wastewater collection and treatment system.

The existing collection system had been cleaned and videotaped from 2005 to 2007. The records show that the majority of the sewer lines have crack, holes, root infiltration and debris build up. As a result, the collection system receives a high level of infiltration of groundwater that affects the capacities of the collection and treatment system.

The existing lagoon system has several deficiencies and needs upgrades including replacing of the existing four aerators that are over 28 years old and addition of a new aerator.

PROJECT NEED:
Because portion of the sewer lines are failing and have inadequate capacity, the city needs to replace the aged sewer lines and upsize the inadequate lines to meet its current and future demand. The city is also proposing to replace the existing aerators, respiratory equipment, flow meter, and a modification in the headwork to improve its treatment system.

PROJECT DESCRIPTION:
Eureka City is proposing the following (selected alternatives Nos. 4 & 8 as listed below).:

- Expansion of the collection system to include new mains along Last Chance Street and Richard Street.
- Install 39 additional manholes to the existing system in the locations that have been identified.
- Construction to replace the existing undersized sewer lines with new PVC sewer
- Replace and upgrade the existing treatment system components including the respiratory equipment, power filter to the incoming power to the building, aerator motor control, four existing aerations, headwork to allow Auger Monster and influent flow meter.
- Install 1 additional aerator with 3 hp.
- Install a SCADA system
- Install discharge flow meter
- Install exterior lighting on building

ALTERNATIVES EVALUATED:

The PER evaluated the following collection and treatment system alternatives:

Collection System

1. No action.
2. Slip lining of portion of the existing sewer lines
3. Pipe bursting of portion of the existing sewer lines
4. Upgrading of portion of the existing sewer lines with construction of new PVC lines
5. Upgrading of all of the existing sewer lines with construction of new PVC lines

Lagoon Treatment System

6. Construction of total containment lagoon system
7. Construction of a winter storage pond
8. Maintaining of the existing lagoon system with seasonal land application

POSITION ON PROJECT PRIORITY LIST:
Eureka City is ranked No.2 out of 11 projects on the FY 2013 Wastewater Treatment Project Priority List.

POPULATION GROWTH:

The average population growth through the year 2032 is estimated to be 2% in the funding application.

	Year	Total
Current ERU:	2013	389
Design ERU:	2032	585

PUBLIC PARTICIPATION AND DEMONSTRATION OF PUBLIC SUPPORT:

Eureka City has conducted a public meeting on February as required by the Utah Wastewater State Revolving Fund (SRF) program. The City will hold a final public hearing upon securing funding from the Water Quality Board.

IMPLEMENTATION SCHEDULE:

Public Meeting	February 2013
Apply to WQB for Funding:	February 2013
WQB Funding Authorization:	May 2013
Public Hearing:	May 2013
Advertise EA (FONSI):	June 2013
Engineering Report Approval:	July 2013
Commence Design:	July 2013
Issue Construction Permit:	January 2014
Advertise for Bids:	January 2014
Bid Opening:	February 2014
Loan Closing:	March 2014
Commence Construction:	April 2014
Complete Construction:	April 2015

APPLICANT'S CURRENT USER CHARGE:

Currently, Eureka city charges a rate of $12.00 per ERU.

COST ESTIMATE:

Engineering – Planning	$100,000
Engineering - Design	$271,000
Engineering – CMS	$450,000
Survey - preliminary & construction	$32,000
Environmental/Permitting	$56,000
Legal/Bonding	$36,530
Construction	$4,959,628
Contingency (23%)	$623,772
DWQ Loan Origination Fee	$ 21,470
Interim financing, ACOE costs	$50,000
Total Amount:	$ 6,600,400

COST SHARING:
This cost sharing is proposed for the project:

Funding Source	Cost Sharing	Percent of Project
WQB Loan, 0%, 30 yrs.	$1,300,000	21%
WQB Grant	$1,147,000	17%
CIB Loan, 0%, 30 yrs.	$353,000	5%
CIB Grant	$353,400	5%
USDA RD Grant	$1,800,000	27%
USDA RD Loan, 2.75%, 38 yrs.	$647,000	10%
US Army of Corp	$1,000,000	15%
Total Amount:	$6,600,400	100%

ESTIMATED ANNUAL COST FOR SEWER SERVICE:

Operation & Maintenance - Annual	$82,570
WQB Debt Service (0.0%; 30 yrs)	$43,333
WQB Required Reserves (1½ pmt/10 yr)	$6,500
Existing Sewer Debt Service (through 2016)	$14,872
CIB/RD Debt Service	$34,424
Monthly Cost / ERU	$44.93
Cost calculated as 1.4 % of MAGI ($38,512)	$44.93

STAFF COMMENTS:
Staff comments and recommendation will be provided at the request for funding authorization.

Eureka Cost Model (2013 dollars)

Loan Terms	
Total Project Cost:	$ 6,600,400
WQB Loan Amount:	$ 1,300,000
WQB Grant Amount:	$ 1,147,000
CIB Grant	$ 353,400
CIB Loan	$ 353,000
USDA RD Grant	$ 1,800,000
USDA RD Loan	$ 647,000
USACE 595 Grant	$ 1,000,000
Local Contribution	$ -
Loan Amortization Term:	30
Interest Rate:	0.0%
Average Payment:	43,333

Annual Sewer Expenses (Est.)	
Proposed Loan Amount:	$ 1,300,000
Current Annual Operating Expense:	$ 82,570
Projected Annual Operating Expense:	$ 82,570
Unit Annual Operating Expense:	$ 285
Inflation Adjustment:	0.00%
Existing Debt Service (thru 2016):	$ 14,872
CIB Loan (0% 30 yrs)	$ 11,767
USDA RD Loan (2.75% 38 yrs)	$ 27,658

Sewer Revenue Sources (Projected)	
Beginning Cash:	$ -
Current Connections (incl. 106 "maintenance fee" only):	389
Regular Customers (ERU):	290
"Maintenance" Customers	106
50% Projected Growth Rate (Regular Customers Only):	1.0%
Sewer Impact Fee:	$ 1,000
Current Monthly User Charge:	$ 12.00
"Affordable" Monthly User Charge:	$ 44.93
Proposed Monthly Debt Service Charge:	$ 21.20
Proposed Monthly O&M Charge:	$ 23.73
Proposed Total Monthly Regular User Fee:	$ 44.93

Sewer Revenue and Expense Projections

Year	Projected Growth (%)	Annual Growth (ERU)	Regular Users (ERU)	User Charge Debt Service Revenue	User Charge O&M Revenue	Total Revenue	WQB Loan Repayment	WQB Loan Reserves	Regular Principal Repayment	Interest Payment	Remaining Principal	Existing/Other Sewer Debt Service	O&M Expenses	Total Expenses	Beginning Cash	Ending Cash Flow	Net Revenue	Debt Service Ratio
2013	0.0%	0	290	-	-	55,231	-		-	-	-	14,872	82,570	97,442	-	42,212	42,212	-
2014	1.0%	3	293	101,523	83,424	184,947	-		-	-	-	14,872	83,424	98,296	42,212	44,440	86,651	-
2015	1.0%	3	296	102,286	84,278	186,565	-		-	-	1,300,000	14,872	84,278	99,150	44,440	131,854	87,414	-
2016	1.0%	3	299	103,050	85,133	188,182	43,333	6,500	43,333	-	1,256,667	39,424	85,133	174,390	131,854	145,646	13,792	1.25
2017	1.0%	3	302	103,813	85,987	189,800	43,333	6,500	43,333	-	1,213,333	39,424	85,987	175,244	145,646	160,201	14,555	1.25
2018	1.0%	3	305	104,576	86,841	191,417	43,333	6,500	43,333	-	1,170,000	39,424	86,841	176,099	160,201	175,520	15,319	1.26
2019	1.0%	3	308	105,340	87,695	193,035	43,333	6,500	43,333	-	1,126,667	39,424	87,695	176,953	175,520	191,602	16,082	1.27
2020	1.0%	3	311	106,103	88,549	194,652	43,333	6,500	43,333	-	1,083,333	39,424	88,549	177,807	191,602	208,448	16,845	1.28
2021	1.0%	3	314	106,866	89,403	196,270	43,333	6,500	43,333	-	1,040,000	39,424	89,403	178,661	208,448	226,056	17,609	1.29
2022	1.0%	3	317	107,630	90,258	197,887	43,333	6,500	43,333	-	996,667	39,424	90,258	179,515	226,056	244,428	18,372	1.30
2023	1.0%	3	320	108,393	91,112	199,505	43,333	6,500	43,333	-	953,333	39,424	91,112	180,369	244,428	263,564	19,135	1.31
2024	1.0%	3	323	109,156	91,966	201,122	43,333	6,500	43,333	-	910,000	39,424	91,966	181,224	263,564	283,462	19,899	1.32
2025	1.0%	3	326	109,920	92,820	202,740	43,333	6,500	43,333	-	866,667	39,424	92,820	182,078	283,462	304,124	20,662	1.33
2026	1.0%	3	329	110,683	93,674	204,357	43,333		43,333	-	823,333	39,424	93,674	176,432	304,124	332,050	27,925	1.34
2027	1.0%	3	332	111,446	94,528	205,975	43,333		43,333	-	780,000	39,424	94,528	177,286	332,050	360,738	28,689	1.35
2028	1.0%	3	335	112,210	95,383	207,592	43,333		43,333	-	736,667	39,424	95,383	178,140	360,738	390,190	29,452	1.36
2029	1.0%	3	338	112,973	96,237	209,210	43,333		43,333	-	693,333	39,424	96,237	178,994	390,190	420,406	30,215	1.37
2030	1.0%	3	341	113,736	97,091	210,827	43,333		43,333	-	650,000	39,424	97,091	179,849	420,406	451,384	30,979	1.37
2031	1.0%	3	344	114,500	97,945	212,445	43,333		43,333	-	606,667	39,424	97,945	180,703	451,384	483,127	31,742	1.38
2032	1.0%	3	347	115,263	98,799	214,062	43,333		43,333	-	563,333	39,424	98,799	181,557	483,127	515,632	32,505	1.39
2033	1.0%	3	350	116,026	99,653	215,680	43,333		43,333	-	520,000	39,424	99,653	182,411	515,632	548,901	33,269	1.40
2034	1.0%	4	354	117,044	100,792	217,837	43,333		43,333	-	476,667	39,424	100,792	183,550	548,901	583,187	34,286	1.41
2035	1.0%	4	358	118,062	101,931	219,993	43,333		43,333	-	433,333	39,424	101,931	184,689	583,187	618,491	35,304	1.43
2036	1.0%	4	362	119,080	103,070	222,150	43,333		43,333	-	390,000	39,424	103,070	185,828	618,491	654,813	36,322	1.44
2037	1.0%	4	366	120,098	104,209	224,307	43,333		43,333	-	346,667	39,424	104,209	186,967	654,813	692,153	37,340	1.45
2038	1.0%	4	370	121,115	105,348	226,463	43,333		43,333	-	303,333	39,424	105,348	188,106	692,153	730,511	38,358	1.46
2039	1.0%	4	374	122,133	106,487	228,620	43,333		43,333	-	260,000	39,424	106,487	189,245	730,511	769,886	39,375	1.48
2040	1.0%	4	378	123,151	107,626	230,777	43,333		43,333	-	216,667	39,424	107,626	190,383	769,886	810,279	40,393	1.49
2041	1.0%	4	382	124,169	108,765	232,933	43,333		43,333	-	173,333	39,424	108,765	191,522	810,279	851,690	41,411	1.50
2042	1.0%	4	386	125,186	109,904	235,090	43,333		43,333	-	130,000	39,424	109,904	192,661	851,690	894,119	42,429	1.51
2043	1.0%	4	390	126,204	111,042	237,247	43,333		43,333	-	86,667	39,424	111,042	193,840	894,119	937,565	43,446	1.52
2044	1.0%	4	394	127,222	112,181	239,403	43,333		43,333	-	43,333	39,424	112,181	194,939	937,565	982,029	44,464	1.54
2045	1.0%	4	398	128,240	113,320	241,560	43,333		43,333	-	-	39,424	113,320	196,078	982,029	1,027,511	45,482	1.55
									1,300,000	-								

Note: Sewer impact fee revenues not accounted for in model, as new growth may just occupy "maintenance fee" homes.

State of Utah

GARY R. HERBERT
Governor

GREG BELL
Lieutenant Governor

Department of
Environmental Quality

Amanda Smith
Executive Director

DIVISION OF WATER QUALITY
Walter L. Baker, P.E.
Director

MEMORANDUM

TO: Water Quality Board

THROUGH: Walt Baker

FROM: Kari Lundeen
Watershed Protection Section

DATE: March 20, 2013

SUBJECT: North Summit Pressurized Irrigation System Project

The North Summit Pressurized Irrigation System Project is being presented to the board as an introduction. There are no staff recommendations at this time.

2.9

195 North 1950 West • Salt Lake City, UT
Mailing Address: P.O. Box 144870 • Salt Lake City, UT 84114-4870
Telephone (801) 536-4300 • Fax (801) 536-4301 • T.D.D. (801) 536-4414
www.deq.utah.gov

Application Number: _____
Date Received: _____
Date to be presented to the WQB: _____

WATER QUALITY BOARD
REQUEST FOR HARDSHIP GRANT

NORTH SUMMIT PRESSURIZED IRRIGATION SYSTEM

Submitted by:

Ross Pace, Chairman
North Summit Pressurized Irrigation Company
1480 South Hoytsville Road
Coalville, UT 84017

Eric Franson, P.E.
Franson Civil Engineers
Phone: (801) 756-0309
Fax: (801) 756-0481
EFranson@fransoncivil.com

2.10

APPLICANT'S REQUEST

North Summit Pressurized Irrigation Company (NSPIC) is requesting a $500,000 hardship grant from the Utah Water Quality Board to be used to complete a pressurized irrigation system that will improve water quality in the Weber River and Echo Reservoir. The pressurized system is ready for construction; however, additional funding is needed to complete the project without having to delay the construction and rebid the project at a later time. In addition, delaying and rebidding the project would increase administrative costs and jeopardize funding already received.

The additional funding needed is due to a reduction in contribution from participating entities and a higher construction bid than anticipated. The reduction in contribution and higher construction bid have placed an unbearable financial hardship on the shareholders, and without additional funds NSPIC will have no means to complete the project. If the project is cancelled, the irrigation shareholders will be responsible for the repayment of a grant from the Bureau of Reclamation. The Reclamation grant is currently being used for legal and engineering fees associated with the formation of the NSPIC, and design of the pressurized irrigation system, respectively. This repayment obligation would be nearly $700,000.

The NSPIC has obtained contributions from several entities that will benefit from the project; however, most of the project will be funded through a loan from the Division of Water Resources that will need to be repaid by the collection of assessments from water deliveries to irrigation shareholders and secondary water users. The Division of Water Resources has determined that the loan committed to this project is the maximum amount that the shareholders can repay. The repayment amount is already above an acceptable threshold; not including operation and maintenances costs, the estimated annual repayment amount is near the extreme high amount of $40 per acre of agricultural land and $240 for secondary use. Operation and maintenance costs will add an additional $10 to $15 per acre. For reference purposes, the agricultural users will be paying five times more than they currently pay for their agricultural shares, while the water bill for secondary users will nearly double. NSPIC has made several changes to the original design to reduce construction costs; but additional funding is still needed to get the repayment obligations to an expensive but acceptable cost, rather than an unbearable cost. If awarded, the requested grant will maintain the momentum and allow the project to be completed as scheduled without causing a financial hardship to nearly 380 shareholders.

NSPIC is a non-profit organization comprising of several entities that have worked together to complete the North Summit Pressurized Irrigation System. This irrigation system will improve water supply deliveries to over 2,000 acres of agricultural land and reduce high nutrient loads into the Weber River and Echo Reservoir. Your support for this project is critical for its completion and your consideration is very much appreciated.

INTRODUCTION

The NSPIC was incorporated in Summit County in August of 2012 as a consortium of several irrigation companies located between the Rockport Reservoir and Echo Reservoir. The NSPIC was created to implement a large irrigation project that will deliver pressurized water to nearly

380 users irrigating over 2,000 acres of farm and residential land. The irrigation companies that are participating in the pressurized system include: Hoytsville, West Hoytsville, Coalville & Hoytsville, Rodeback, East Wanship, Wilde A, Hobson-Bullock, and Elkhorn Ditch Companies. In addition, the Hoytsville Pipe Water Company, which provides culinary water to approximately 170 shareholders, as well as some individual water right holders, is also part of the NSPIC consortium. The pressurized system will provide Hoytsville Pipe Water Company shareholders with a secondary system to irrigate their yards and gardens, which allows the culinary water to be conserved and used for potable purposes only.

A location map, showing the existing canals for the participating companies, is shown in the enclosed figure. Currently the ditch companies maintain more than 28 miles of unlined open ditches. Approximately 40 percent of existing land is flood irrigated with the remaining being irrigated by a pump and sprinkler system. The ditch companies divert an average of 9,500 acre-feet of water annually. The current conveyance system is estimated to lose approximately 40 percent of the diverted water to seepage and evaporation. In addition, flood irrigation is approximately 50 percent efficient and the irrigation runoff returns to the Weber River. These runoffs have high concentrations of nutrients from manure that is typically used as a fertilizer. As a result, these runoffs with high concentrations of phosphorus return to the river and flow to Echo Reservoir, contributing to poor water quality.

The NSPIC was formed in an effort to replace all the existing canals with a single pressurized irrigation system (see enclosed figure). This system will consist of approximately 20 miles of pipelines and will optimize the water use for the irrigators in the project area and also serve as a secondary system for the Hoytsville Pipe Water Company shareholders. By converting all open ditches into pressurized irrigation pipelines, the project is estimated to reduce diversion from the Weber River by approximately 3,800 acre-feet. In addition to all the water conserved, irrigators will switch from flood irrigation to more efficient sprinkler irrigation methods which will not only conserve more water, it will improve the water quality of return flows into the Weber River. Because farmers use fertilizers to increase crop production, the resultant runoff from flood irrigation is high in phosphorus and nitrogen. This high nutrient runoff has contributed to the poor water quality issues in Echo Reservoir, which was added to the list of impaired water bodies in 1996.

By implementing this project, approximately 3,800 acre-feet of relatively clean water will be allowed to remain in the Weber River; nearly 800 acres of farmland will convert to sprinkler irrigation and significantly reduce return flows that have high nutrient levels; furthermore, the project will conserve water and provide the agricultural users with a more reliable supply, which will improve crop yield and economic development in the valley. The project will not impact minimum stream flows due to hydropower production at Wanship Dam and prior minimum stream flow agreements.

WATER QUALITY IMPROVEMENT

With irrigators switching from flood irrigation to sprinkler irrigation, the water quality will be improved in Echo Reservoir. Flood irrigation creates runoff that causes nutrient loading in the Weber River, which eventually flows to Echo Reservoir. Echo Reservoir was added to the list of

impaired water bodies in 1996. At least part of the suspected cause of the impairment of Echo Reservoir is from flood irrigation and high nutrient return flows. In 2006, the DWQ put out a draft Total Maximum Daily Loads (TMDL) study for Echo Reservoir. According to the report, Echo Reservoir was declared to be impaired for Class 3A-cold water species of game fish and other cold water aquatic life. The limiting nutrient that led to the impairment was phosphorus. The report identify that approximately 942 kg/year of phosphorus is added to the Weber River between Rockport and Echo Reservoirs. The load could be significantly reduced by implementation of this project. The new TMDL report is almost complete and it is expected that this project will be compatible with report recommendations.

PROJECT STATUS

The engineering design for the pressurized irrigation system has been completed. Bid documents were released to pre-qualified contractors in January 2013. The bid came in higher than hoped and the project can't move into construction phase without causing a financial burden on the agricultural and secondary water users. The increase in construction cost is not acceptable to many of the irrigation shareholders and without assistance from the Board of Water Quality the project may not be constructed. NSPIC has altered the design to reduce project costs, but additional funding is still needed to reduce repayment costs to an acceptable amount.

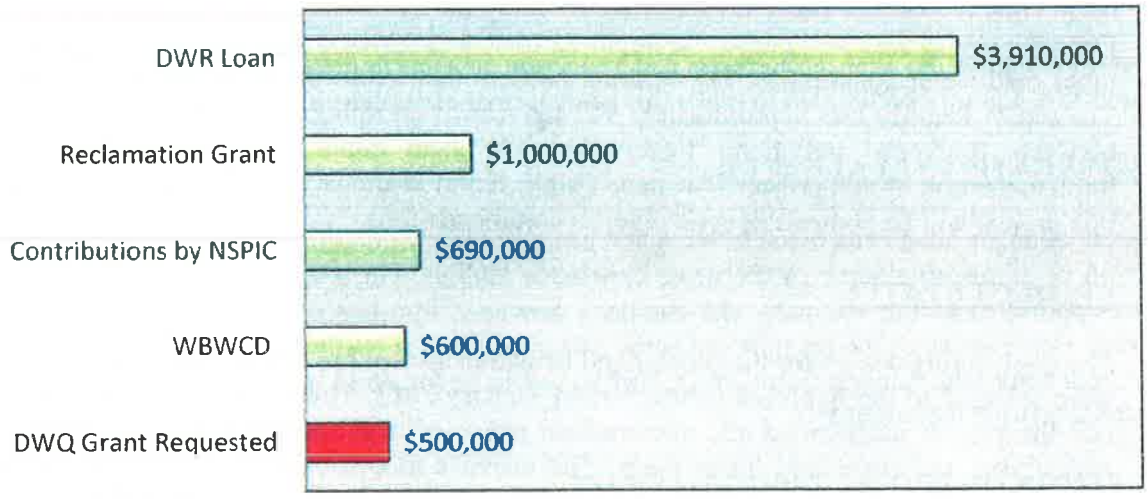
COST ESTIMATE

The preliminary cost estimate for engineering, construction, legal fees, and administrative tasks was estimated at $5.6 million, with approximately $4.8 million estimated for construction. This preliminary cost estimate did not include the work on Wanship Dam. Bid documents were released in January and the low bid on the pressurize system was slightly over $6.3 million. The system was reevaluated and design changes were made to reduce construction costs. Reevaluation of the system allowed the construction costs to be reduced to approximately $5.3 million without eliminating any portion of the system and still delivering water to all the shareholders. To complete the project, the shareholders are requesting a grant for a total of $0.5 million to bring the project within budget and not cause an unbearable financial hardship on the irrigation shareholders. The requested grant would allow the project to be completed and would be much appreciated. The deficiency in funding has hindered the beginning of construction and delayed the construction of the west pipeline until after the 2013 irrigation season. Construction must start as soon as possible in order to complete the work at the Wanship Dam and construct the East Wanship pipeline prior to the beginning of this coming irrigation season.

The total project cost is shown below:

Wanship Dam Connection (WBWCD)	$600,000
Construction Costs for Pipelines	$5,300,000
Legal & Administrative	$100,000
Design & Construction Management	$700,000
Total	**$6,700,000**

The total funds acquired and requested are shown below:



EFFORTS TO SECURE FINANCING FROM OTHER SOURCES

Efforts to secure funding from other sources outside of the Division of Water Quality have been largely successful to date. The irrigation shareholders have dedicated easements as well as significant time and other in-kind resources. In addition, the irrigation shareholders will directly contributed approximately $690,000 in funds. Several property owners have granted easements for the pipeline without compensation as an act of support for the project. It is estimated that property owners have donated nearly $300,000 in easements through private property. The donated easements are not included in the numbers above.

The Bureau of Reclamation has awarded a WaterSMART grant for a total of $1 million. This grant is currently being used for the engineering design and legal fees associated with the formation of NSPIC. Weber Basin Water Conservancy District (WBWCD) has committed to contributing $600,000 to pay for all design, permitting, and construction costs associated with the project on federal land immediately downstream of Wanship Dam. WBWCD will also not charge a fee for power generation capacity lost due to diversion of water upstream of the turbine. WBWCD is contributing towards the project, but not the $1 million hoped for when funding was being identified.

NSPIC is currently working on an agreement with Coalville City to use a portion of their existing pressurized irrigation system. It is anticipated that the city will waive all excavation and permit fees for the project. The Natural Resources Conservation Service (NRCS) is providing financial assistance to individual shareholders for on-farm improvements. NRCS can only provide grants to individuals, so no funding from NRCS for the project is available. This assistance will help the individual irrigators that are converting from flood to sprinkler irrigation. Several farmers have filed applications to obtain matching grants through the EQIP program.

The remaining funds needed for the project were obtained from the Utah Division of Water Resources (DWR) as a 30-year loan at 1 percent interest. The $3.91 million loan was determined by DWR to be the highest loan amount that can be repaid by the NSPIC shareholders.

Due to a higher bid than anticipated and reduction in contribution from WBWCD, NSPIC is requesting a grant of $500,000 to make this project financially feasible.

ALTERNATIVES EVALUATED

Design changes have been made to bring the project more within budget. We have evaluated the option of eliminating some of the more expensive laterals which would eliminate some of the participating irrigation company shareholders; however, eliminating a portion of shareholders served also eliminates the revenue collected and the ability of NSPIC to repay the loan to DWR. Without additional funding from DWQ, NSPIC would be forced to remove parts of the project or to not construct the project.

POSITION ON PROJECT PRIORITY LIST

This project is not listed on the non-point source priority list; however, this project addresses nutrient loading into Echo Reservoir from the stretch of the Weber River located between Rockport Reservoir and Echo Reservoir.

IMPLEMENTATION SCHEDULE

The following timeline is dependent on project funds.

Award Construction Project	March 1, 2013
Construction Mobilization	March 15, 2013
Complete East Wanship Pipeline	May 15, 2013
Compete Hoytsville Pipeline	August 15, 2013
Complete Elkhorn Pipeline	November 1, 2013
Complete West Hoytsville Pipeline	April 1, 2014
Construction Completed	April 1, 2014

To allow critical portions of the system to be constructed before May 15, NSPIC is planning to award a construction contract by March 1. Portions of the project will be removed if additional funding is not obtained. Eliminating portions of the system will compromise the ability of remaining shareholders to meet the requirements of the DWR loan.

2.15

North Summit Irrigation Project $500,000 grant request, March 2013

This project will convert approximately 800 acres of farmland from flood to sprinkler irrigation in the reach of the Weber River between Wanship Dam and Echo Reservoir. Echo Reservoir is listed for low dissolved oxygen due to excessive phosphorus loading.

A draft TMDL, completed in 2006, called for the following reductions in total phosphorus in the source categories and the segment of the Weber River that would be addressed by this project:

Source	Load Reduction of each source in the Weber River below Wanship dam (kg/year)	% reduction of each source in the Weber River below Wanship dam
Land applied manure	399	80 %
Grazing	82	10 %
Diffuse runoff	291	10 %
Total	772	96%

These load reductions represent 96% of the non-point source load reductions called for in that segment of the Weber River. In turn, these non-point source load reductions represent 17% of the reductions called for in the entire Echo Reservoir watershed. It is important to note that these calculations are based on the draft TMDL, which was not approved by EPA. A new TMDL is currently in development and a draft will be available in July 2013.

Load reduction calculations (provided by Franson Civil Engineers)

Irrigation and Grazing[1]

(Irrigation + grazing) x % of watershed in agriculture = load reduction

389 kg/year + 1,468 kg/year = 1,857kg/year x 48% = **891 kg/year**

Seepage/overland flow/groundwater loading reduction

Seepage/overland flow/groundwater loading x % reduction in seepage = load reduction

1,857 kg/year x 20% = **371 kg/year**

Total load reduction

891 kg/year + 371 kg/year = **1,262 kg/year**

[1] This assumes that all grazing will be converted to crop production

Based on the estimated load reductions provided by Franson, this project would reduce phosphorus loads to Echo Reservoir in accordance with the 2006 draft TMDL.

Project Budget

Work Elements	Cost
Wanship Dam Connection (WBWCD)	$ 600,000
Construction Costs for Piplelines	$ 5,300,000
Legal and Administrative	$ 100,000
Design & Construction Management	$ 700,000
Total	$ 6,700,000

Funding Acquired

Source	Amount	% Contribution
Division of Water Rights Loan	$ 3,910,000	58%
Bureau of Reclamation Water SMART Grant	$ 1,000,000	15%
Contributions by North Summit Pressurized Irrigation Company	$ 690,000	10%
Weber Basin Water Conservancy District	$ 600,000	9%
Grant requested from DWQ	*$ 500,000*	*7%*
Total	$ 6,700,000	100%

Costs and comparisons

Project cost per pound Phosphorus removed

Based on a $ 500,000 grant: **$ 396/kg TP removal**

$ 180/pound TP removal

WWTP cost per pound Phosphorus removed

Oakley: **$ 68.85/pound**

Silver Creek WRF: **$ 35.40/pound**

Median for WWTPs studied: **$ 37.16/pound**

Project Implementation costs to irrigators

Without the grant: **$ 54/acre**

With the grant: **$ 41/acre**

State of Utah
GARY R. HERBERT
Governor

GREG BELL
Lieutenant Governor

Department of
Environmental Quality

Amanda Smith
Executive Director

DIVISION OF WATER QUALITY
Walter L. Baker, P.E.
Director

MEMORANDUM

TO: Water Quality Board Members

THROUGH: Walter L. Baker, Director

FROM: Jim Bowcutt, Nonpoint Source Program Coordinator

DATE: March 13, 2013

SUBJECT: Approval of Statewide Nonpoint Source Pollution Management Plan

The Governor of each state is required to develop a management program to reduce nonpoint source pollution from navigable waters in accordance with Section 319 (b)(1) of the Clean Water Act. The Division of Water Quality has been delegated the responsibility for developing and updating the Nonpoint Source Pollution Management Plan. This document identifies the approaches used to manage nonpoint source pollution in surface water and groundwater throughout the state of Utah.

The most recent revision of the Statewide Nonpoint Source Management Plan has been completed in cooperation with the inter-agency Water Quality Task Force. A draft of the latest version of the Statewide NPS Management Plan, along with the appendices can be found at the following location:

http://www.waterquality.utah.gov/NPS/index.htm

Division Staff will present the revised management plan to the Water Quality Board on March 27th, 2013, and will seek approval of the plan in preparation for submitting the plan to the State Attorney General and Governor for approval.

3.1

195 North 1950 West • Salt Lake City, UT
Mailing Address: P.O. Box 144870 • Salt Lake City, UT 84114-4870
Telephone (801) 536-4300 • Fax (801) 536-4301 • T.D.D. (801) 536-4414
www.deq.utah.gov

Deseret News

Kennecott taking public comment on groundwater permit

Published: Tuesday, March 12 2013 1:26 p.m. MDT

SALT LAKE CITY — Public comment begins Tuesday on Kennecott Utah Copper's proposal to modify an existing groundwater permit to relocate and rebuild the water collection and capture system for the Bingham Canyon Mine.

The East Waste Rock Extension is an alternative method for managing rock and soil overburden from within the mine's current operational boundaries. The current water collection system would be covered and a new capture system would be installed.

The public can provide comments through the close of business April 26. Two public information meetings and a public comment hearing are scheduled for stakeholders and the public to learn about the proposed modification.

Details about the modification request can be found on the Division of Water Quality's website or can be viewed in person at the Division of Water Quality, 195 N. 1950 West.

The division also will host one of the public information meetings from 6-8 p.m. March 21. The other meeting will be held April 8 at Daybreak Community Center, 4544 W. Harvest Moon Drive in South Jordan, with a public information meeting from 6-7:30 p.m. and public comment meeting from 7:30-8:30 p.m.

Written comments can be sent to the Division of Water Quality, P.O. Box 144870, Salt Lake City, UT 84114-4870.

Questions about the project can be directed to environmental scientist Dan Hall at 801-536-4300.

3.2

Chevron shuts Utah diesel pipeline after finding leak

Tue, Mar 19 2013

(Reuters) - Chevron Corp shut a 29,400 barrel-per-day (bpd) pipeline carrying diesel and jet fuel between its Salt Lake City, Utah, refinery and Boise, Idaho after a leak was discovered in wetlands where millions of migrating birds will rest in the coming weeks, Utah officials said on Tuesday.

"One of the concerns we have is we have three weeks to clean up before the northern migration," said John Whitehead, assistant director of the Utah division of water quality.

The northern migration is the return of birds that wintered south of Utah to nesting areas north of Utah in Idaho, Montana and Canada.

"More important (than risk of fire) are the toxic effects on the ecosystem," he said. "The diesel is floating right now. That allows the cleanup to happen more easily. But we will be looking at longer term impacts to the wetland area it flows through."

The leak occurred in the wetlands less than a quarter of a mile from Willard Bay, which drains into the Great Salt Lake, near Ogden, Utah.

There was no visible sign that contamination has entered the bay, said Whitehead. A small surface stream flows near the pipeline break and that flows directly into the bay.

Willard Bay is a manmade freshwater reservoir sandwiched between the Great Salt Lake and the Wasatch Mountains. The bay and adjoining wetlands are a key stop for migratory water birds like ducks, geese, tundra swans, white pelicans and shore birds.

Chevron detected a drop in pressure along the pipeline at 2:30 p.m. MDT Monday (1830 GMT Monday) and closed the valves allowing diesel and jet fuel to flow though the line.

"There are no further details about the impact on (Chevron) operations at this stage. The volume of the release is still to be determined," Chevron spokesman Gareth Johnstone said in an email.

The leaking pipeline carries diesel and jet fuel from the 45,000 bpd Salt Lake City refinery through Burley, Idaho to Boise. A second pipeline carries gasoline from Salt Lake City to Boise.

Whitehead said the leak was estimated to be between 100 barrels and 150 barrels (4,200 gallons-6,300 gallons).

The site of the leak was found at 6:30 p.m. MDT Monday.

The company said it had mobilized emergency and clean-up crews, and initiated emergency response procedures.

About 100 people were working on containment and clean-up, Whitehead said.

In 2010, a leak from an oil pipeline supplying Chevron's Salt Lake City refinery contaminated a creek feeding the Great Salt Lake. Clean-up workers collected about two-thirds of estimated 785 barrels (33,000 gallons) in oil that leaked from the pipe.

(Reporting By Laura Zuckerman in Salmon, Idaho and Shruti Chaturvedi in Bangalore; Editing by Himani Sarkar)

(Al Hartmann | The Salt Lake Tribune) Workers with booms and absorbent material contain a leak from a Chevron pipeline in a wetland area between Willard Bay North Marina and I-15 Tuesday March 19. The leak was detected Monday. Authorities said the leak was contained in retaining ponds and none went into Willard Bay.

Diesel spill closes portions of Willard Bay State Park

Officials say the leak appears small, but wildlife impact feared.

By Judy Fahys And Bob Mims | The Salt Lake Tribune
First Published Mar 19 2013 12:39 pm • Updated 1 minute ago

Emergency responders on Tuesday flocked to Chevron's third petroleum pipeline spill in Utah in less than three years.

Willard Bay State Park officials closed down the facility on the northeastern edge of the Great Salt Lake and evacuated two campers and the park manager's family after around 4,200 to 6,300 gallons of diesel fuel leaked from the pipeline just north of the park. They also rescued two beavers from the contaminated area and sent one off-site for cleaning.

Willard Bay Oil Spill by The Salt Lake Tribune

Meanwhile, investigators descended upon the scene to probe what happened and why as responders scrambled to find the leak's source. And Chevron dispatched dozens of cleanup workers to the scene to lay down absorbent booms to sop up the diesel and contain the damage to a ditch running between Interstate 15 and the freshwater reservoir

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Willard Bay diesel spill
A diesel fuel spill from a Chevron pipeline forced tions at the Willard Bay State Park north unit.

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Photos

At a glance

What's next?

Chevron has 30 days to provide federal pipeline regulators with a report on what happened. Meanwhile, a variety of local, state and federal agencies will be monitoring the cleanup, any effects on water and wildlife and possible enforcement action, including fines that take into account the two 2010 spills. In light of the north marina's closure, Utah State Parks hopes to open the south marina by Wednesday.

Join the Discussion
» Post a Comment

on the edge of the internationally significant Great Salt Lake marshes.

John Whitehead, deputy director of the Utah Division of Water Quality, said he heard about the spill Monday night and had water-quality scientists on the scene early Tuesday to begin testing the water for contamination.

This is the third time his agency has been pressed into action on a leaky petroleum pipeline spill since the big Chevron crude oil leak in the Salt Lake Valley foothills on Red Butte Creek June, 11, 2010, and the smaller spill the following December.

"All the things we learned at Red Butte," said Whitehead, "we can apply here and have."

An investigator from the U.S. Department of Transportation's Pipeline and Hazardous Materials Safety Administration was headed to the scene Tuesday afternoon, according to agency spokesman Damon Hill.

Curtis Kimbel, the U.S. Environmental Protection Agency's on-scene coordinator for the spill response, said there is no evidence so far of diesel getting into the reservoir or the bay. Chevron crews were digging out the pipe late Tuesday and had tankers vacuuming the fuel from the ditch, he said.

The two big concerns, he said, are ensuring that the reservoir, which is jointly managed by the U.S. Bureau of Reclamation's Provo Area Office in partnership with the Weber Basin Water Conservancy District, remains protected and that migratory birds are not harmed.

"Our primary focus right now is to make sure diesel does not go into the Willard Reservoir," Kimbel said, "and that we come up with a strategy that cleans things up effectively and quickly."

Phil Douglass, Northern Region conservation outreach manager for the Utah Division of Wildlife, said the leak prompted evacuation of the park's North Recreation Area overnight. He was among the state officials on-scene, scrambling to determine the leak's potential impact on natural resources.

Douglass said the spill was contained to a small area by early Tuesday afternoon. But its effect on the sensitive aquatic environment of the area was not immediately

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apparent, he said.

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"From the wildlife perspective," said Douglass, "we are obviously very concerned about how this will impact the wildlife and the fishery that exists in that area."

Willard Bay comprises nearly 10,000 acres of fresh water that is located atop the Great Salt Lake flood plain north and west of Ogden. In addition to wildlife, it supports populations of crappie, walleye, wiper and catfish in its popular fishery. The area is also popular with boaters.

Deena Loyola, spokeswoman for Utah State Parks and Recreation, said Tuesday's closure specifically targeted the park's North Marina and campgrounds and would be in effect until further notice.

Eric Bartlett and his wife planned to stop at Willard Bay's north marina on Tuesday to grill, picnic and spend the night in their RV, which they've been driving across the country since October. But as they pulled off I-15, they only found a closed gate.

"Nope, guess not," he said. "We'll just keep going."

Even with no sign the had fuel contaminated the reservoir or the bay, a fisheries biologist was to test the bay's nearby waters to make sure, said Park Manager James Morgan.

The company notified Morgan late Monday about the leak. He was advised to evacuate the two occupied campsites at the park, as well as his own family who lives on-site.

Morgan returned Tuesday morning to help with the cleanup taking place in a culvert between the Cottonwood campground and Eagle Beach. As of Tuesday afternoon, it wasn't clear what impact the spill has had on the bird life, including the ducks that use the area for nesting.

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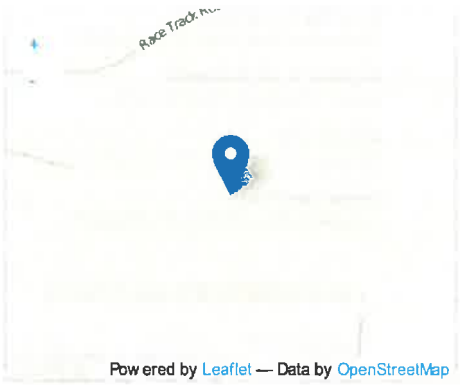
Map



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more oil!
more gas!
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whoohoo!

they don't make our world any better, but they sure do make some people rich (and others stupid)

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Gee. Another Chevron Oil spill. No worries- they'll clean it up just like new. Right? Just like they did a few years ago in Red Butte Creek. We don't need inspections or regulations, let the industry regulate itself. Right

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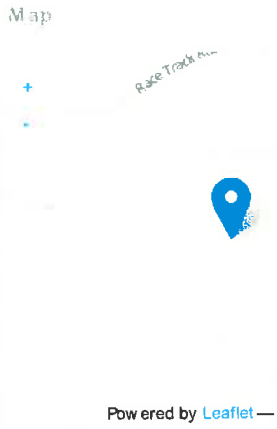

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Deseret News

Diesel spill closes marina at Willard Bay State Park, shuts down pipeline

By Shara Park and Emiley Morgan , Deseret News
Published: Tuesday, March 19 2013 9:23 p.m. MDT

Crews work to prevent diesel fuel from leaking into Willard Bay after an apparent break in the Chevron diesel pipeline just west of I-15 Tuesday, March 19, 2013, in Willard. (Tom Smart, Deseret News)

WILLARD, Box Elder County — Parts of Willard Bay State Park were closed Tuesday after a pipeline break led to the release of diesel fuel into a retention pond and drainage ditch near the park.

The park's North Marina and campground were closed indefinitely as a result of the leak, said Deena Loyola of Utah State Parks and Recreation. All campers were evacuated Monday evening, and park employees were working Tuesday to de-winterize the South Marina.

Greg Hardy, state government affairs representative at Chevron, said release of fuel was detected by a sensor around 2:30 p.m. Monday on a pipeline that transports materials from Chevron's Salt Lake City refinery to Idaho.

"When it was discovered or identified that there was a possible leak, the system was shut down immediately and crews were sent out to the site," Hardy said. "We mobilized emergency and cleanup crews and initiated all the emergency response procedures."

Diesel was visible, and booms were used to contain the spill, he said.

"At this point in time, there is no indication" that anything leaked into Willard Bay, Hardy said. Water samples have been taken to determine whether the diesel fuel reached the bay. Chevron is now working to identify where the leak was, what may have caused it and how much diesel was released.

The Utah Division of Water Quality estimates that between 4,200 gallons and 6,300 gallons of diesel fuel leaked from the pipeline. Chevron will be able to generate a closer estimate of the amount of fuel spilled by measuring the speed of the flow of diesel fuel in the

Crews work to prevent diesel fuel from leaking into Willard Bay

pipe and by measuring the amount of product recovered during the cleanup.

after an apparent break in the Chevron diesel pipeline just west of I-15 Tuesday, March 19, 2013, in Willard. (Tom Smart, Deseret News)

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"We're satisfied that Chevron has put the proper amount of resources on this right now," said John Whitehead, DWQ's assistant director.

As far as the speed of recovery, "it will take some time," Whitehead said.

Chevron crews will first pull up the diesel fuel in the water and in the dirt surrounding the leak. Then comes what Whitehead calls the "ticklish part" of cleanup.

Because the fuel leaked into a stream, officials with the Department of Environmental Quality, local health department and state parks will need to determine whether to dig up the contaminated areas — and disrupt the fragile ecosystem — or let the environment clean itself out.

The pipeline is 168 miles long with a capacity of 20,000 to 30,000 barrels a day.

Hardy said cleanup efforts were under way Tuesday, and all government agencies have been notified about the leak.

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The U.S. Bureau of Reclamation said in a news release the fuel spilled into Willard Creek, where it was contained by a beaver dam. None of the fuel made its way to the reservoir, the agency reported.

Two beavers were contaminated in the fuel spill and were "pretty saturated," said Phil Douglass, regional outreach manager for the Utah Division of Wildlife Resources. They were taken to the Wildlife Rehabilitation Center of Northern Utah, where firefighters used hazardous materials equipment to try and soak up as much fuel as possible.

"They were (also) washed in a solution of Dawn detergent," Douglass said. "Every effort is being made to save these beavers."

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Because they are aquatic creatures, he

Crews work to prevent diesel fuel from leaking into Willard Bay after an apparent break in the Chevron diesel pipeline just west of I-15 Tuesday, March 19, 2013, in Willard. (Tom Smart, Deseret News)

said there is a possibility the beavers also ingested some of the fuel, which would cause respiratory issues. Whether they will survive is "hard to say."

"They could be (at the rehabilitation center) for a couple of months," Douglass said. "It's just too early to tell right now, but every effort is being made to treat them and give them a fighting chance."

Diesel fuel is toxic, said Dalyn Erickson, wildlife specialist at the Wildlife Rehabilitation Center of Northern Utah. It can cause severe skin irritation issues and respiratory issues.

Both beavers had two baths as of Tuesday evening and started medications to help coat their intestinal tracts in an attempt to prevent further damage to the tract and help pass ingested fuel more easily. They are also giving the beavers preventative medication for treating respiratory infections.

At this point, the beavers seem to be doing well, Erickson said, but it could be weeks before resperatory and intestinal issues are evident.

The fumes clinging onto the beavers were so strong that many of the 15 volunteers working on the beavers Tuesday had headaches.

"It's so overpowering that it's unreal," Erickson said.

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Depending on the severity of the spill, the youngsters — not even a year old — will either be reintroduced to the bay or the rehabilitation center will work with the Division of Wildlife Services to find them a new home.

Loyola said James Morgan, Willard Bay State Park manager, "is working with Chevron, the Weber Basin Water Conservancy District, Bureau of Reclamation, and Division of Wildlife Resources to ensure the protection of all resources, including wildlife habitat."

Updated information on the park is available at stateparks.utah.gov/parks/willard-bay.

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